

Figure 1
Activities (lines) and pyrophoricity (columns) of
FeCr, CuO/ZnO/Al₂O₃, CuO/CeO₂ and CuO/CeO₂/Al₂O₃
2% CO, 10% H₂O, 20% H₂, 5% CO₂; VHSV = 5,000 h⁻¹

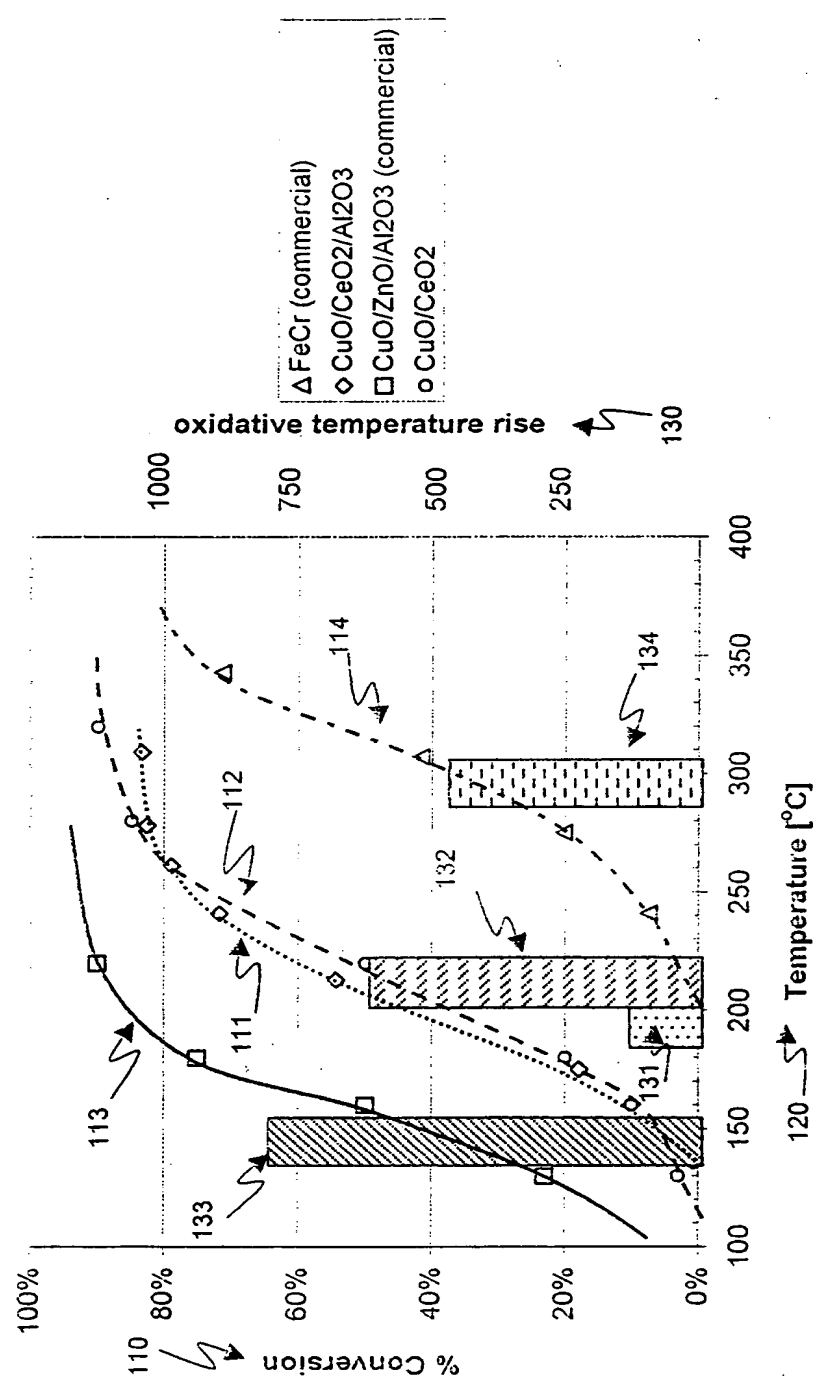


figure 2

Comparison of activity (lines) and pyrophoricity (columns) of
 Pt/CeO_2 and $\text{Pt/CeO}_2/\text{Al}_2\text{O}_3$ catalysts
 0.5% CO, 20% H_2 , +10% H_2O , WHSV=24,000 h^{-1}

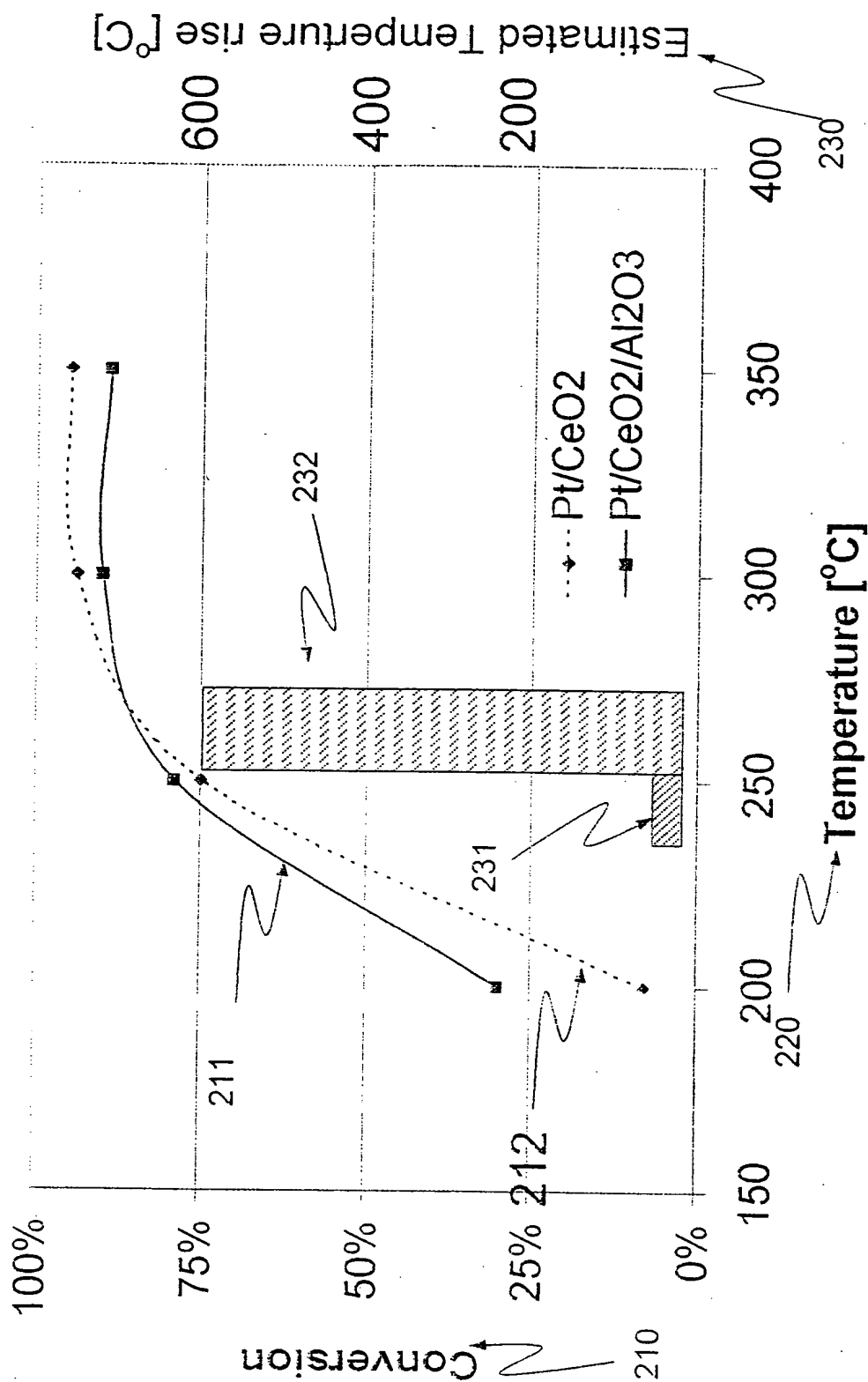


figure 3

Patented 2004-04-20

Dependence of WGS activity on Ce- and Cu-loading (18,846-29+38, samples WR-66,75, exp. WR-67,76,78)

test conditions: 2% CO, 20% H₂, +10% H₂O balance N₂ WHSV = 30,000 h⁻¹

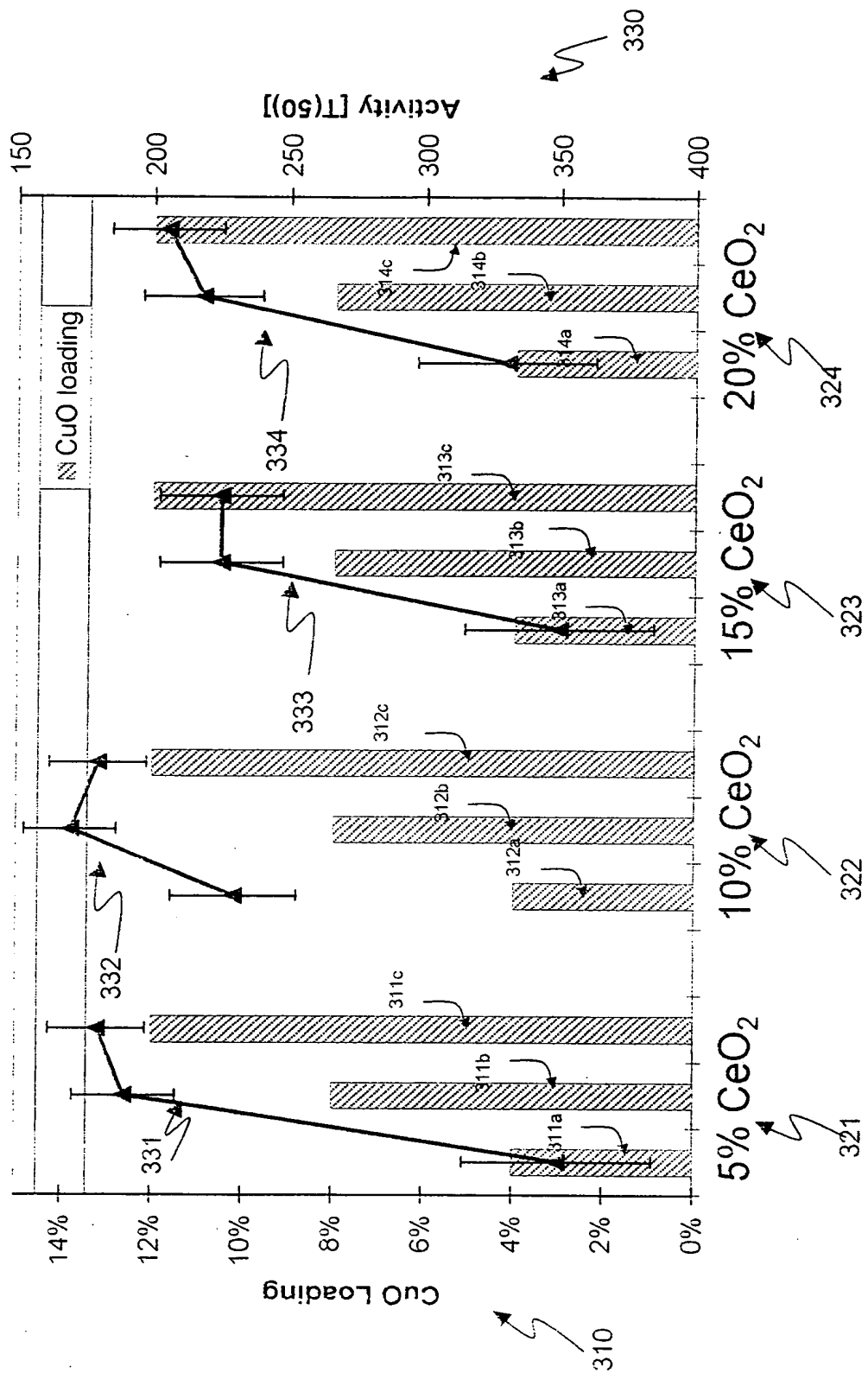


figure 4

TABLE 4

Effect of Ce and Pt loading on the activity of Pt/CeO₂/Al₂O₃ catalysts
0.5% CO, 20% H₂, +10% H₂O, WHSV=24,000 h⁻¹

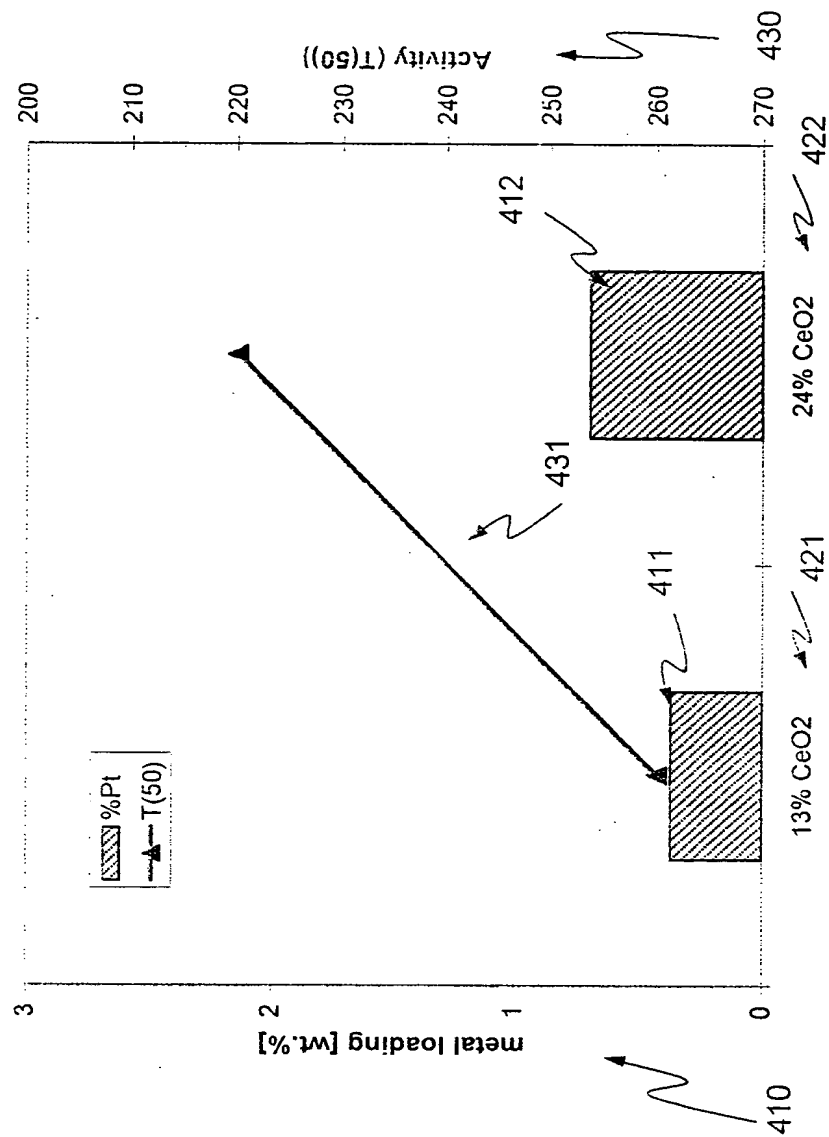
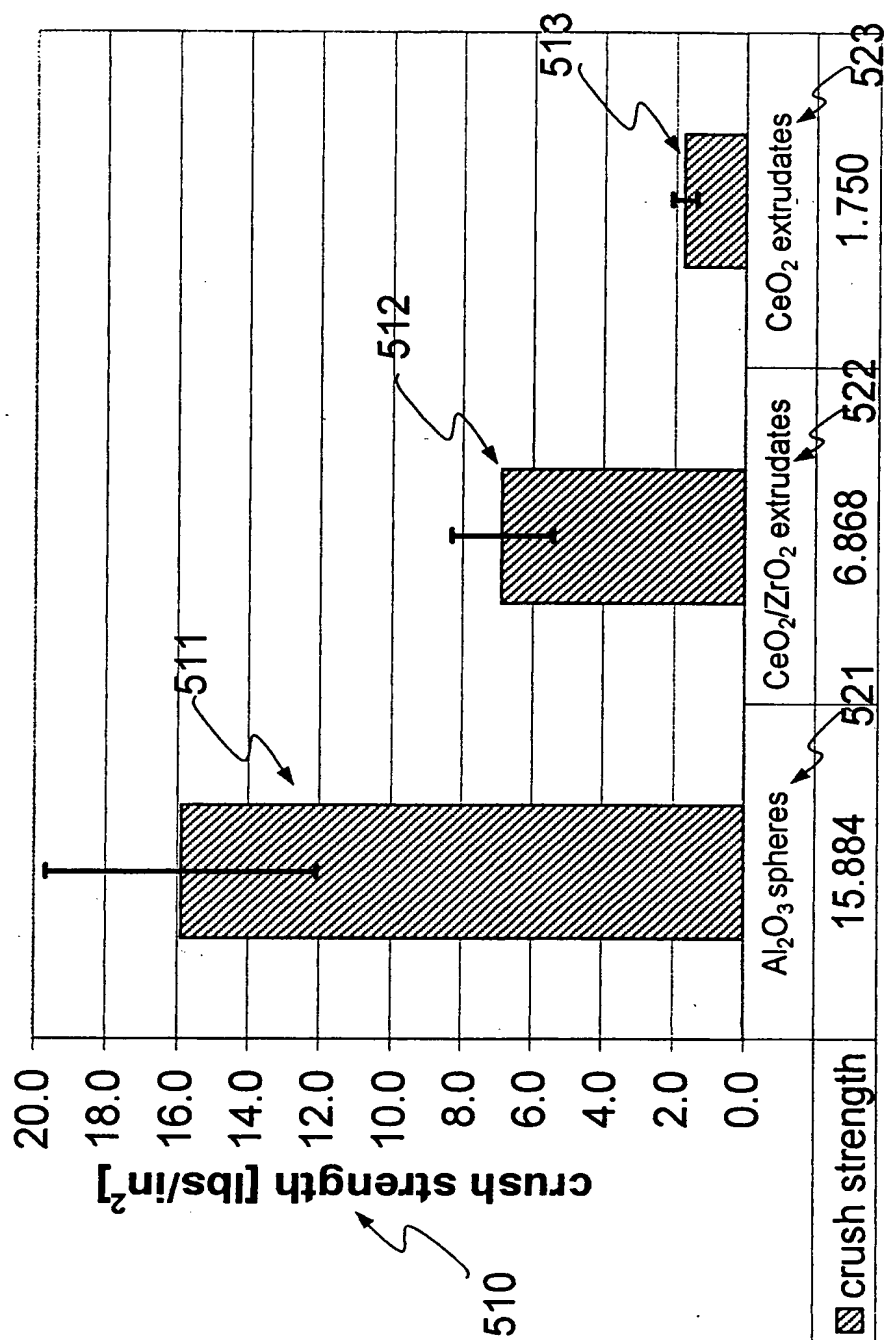


figure 5

Crush strength of catalyst support particles

Average and standard deviation of 20 samples



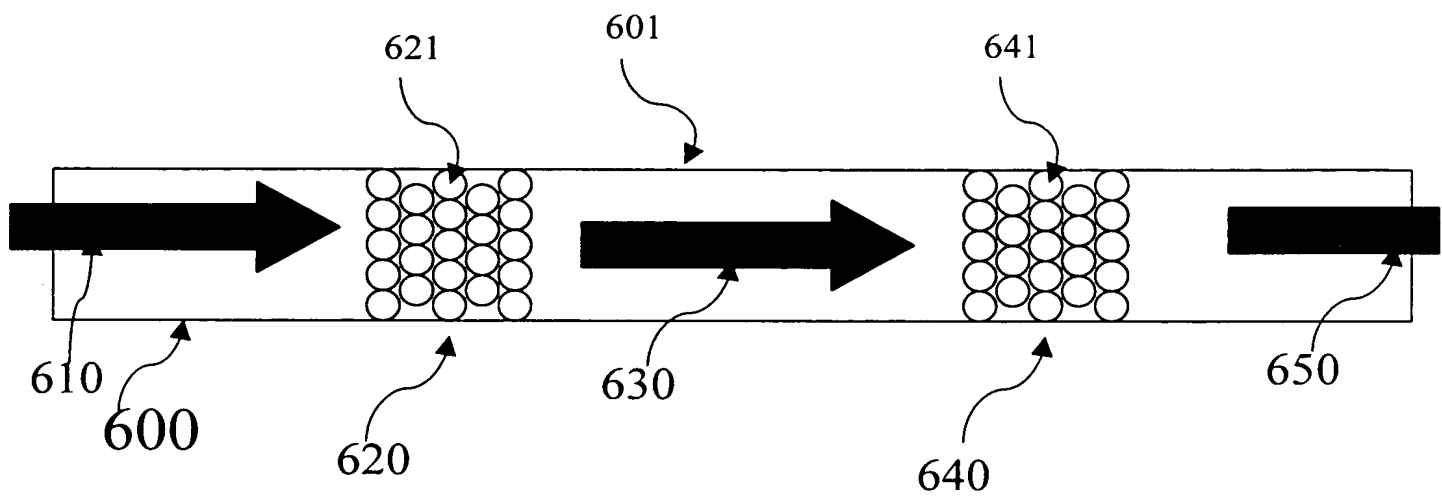


FIG. 6

FIG. 6

Figure 7: Effect of Cr_2O_3 Level on the Catalytic Activity of $\text{CuO}/\text{Al}_2\text{O}_3$ WGS Reaction Catalysts

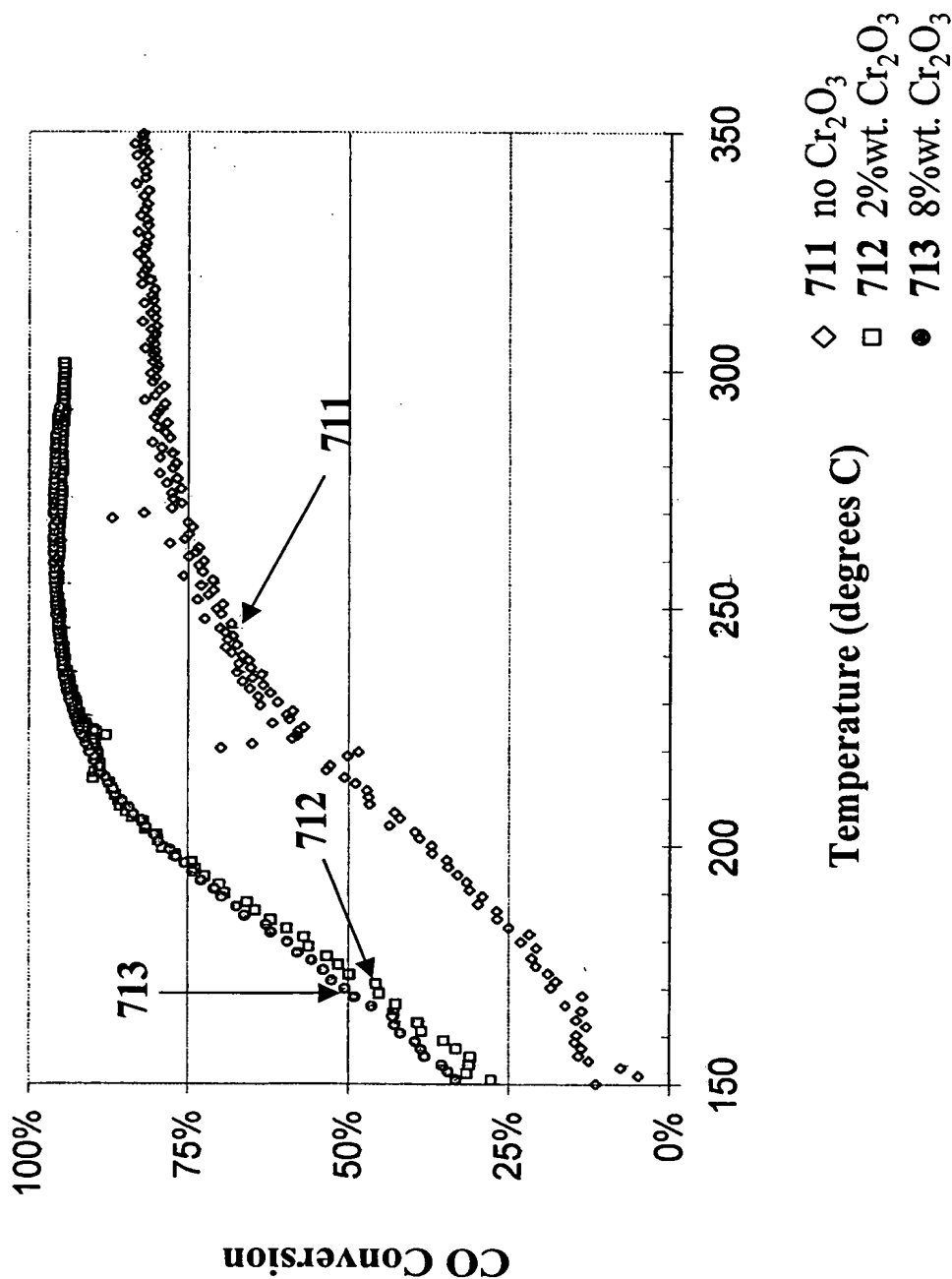


Figure 8: Effect of Cr_2O_3 Level on the Catalytic Activity of $\text{CuO/CeO}_2/\text{Al}_2\text{O}_3$ WGS Reaction Catalysts

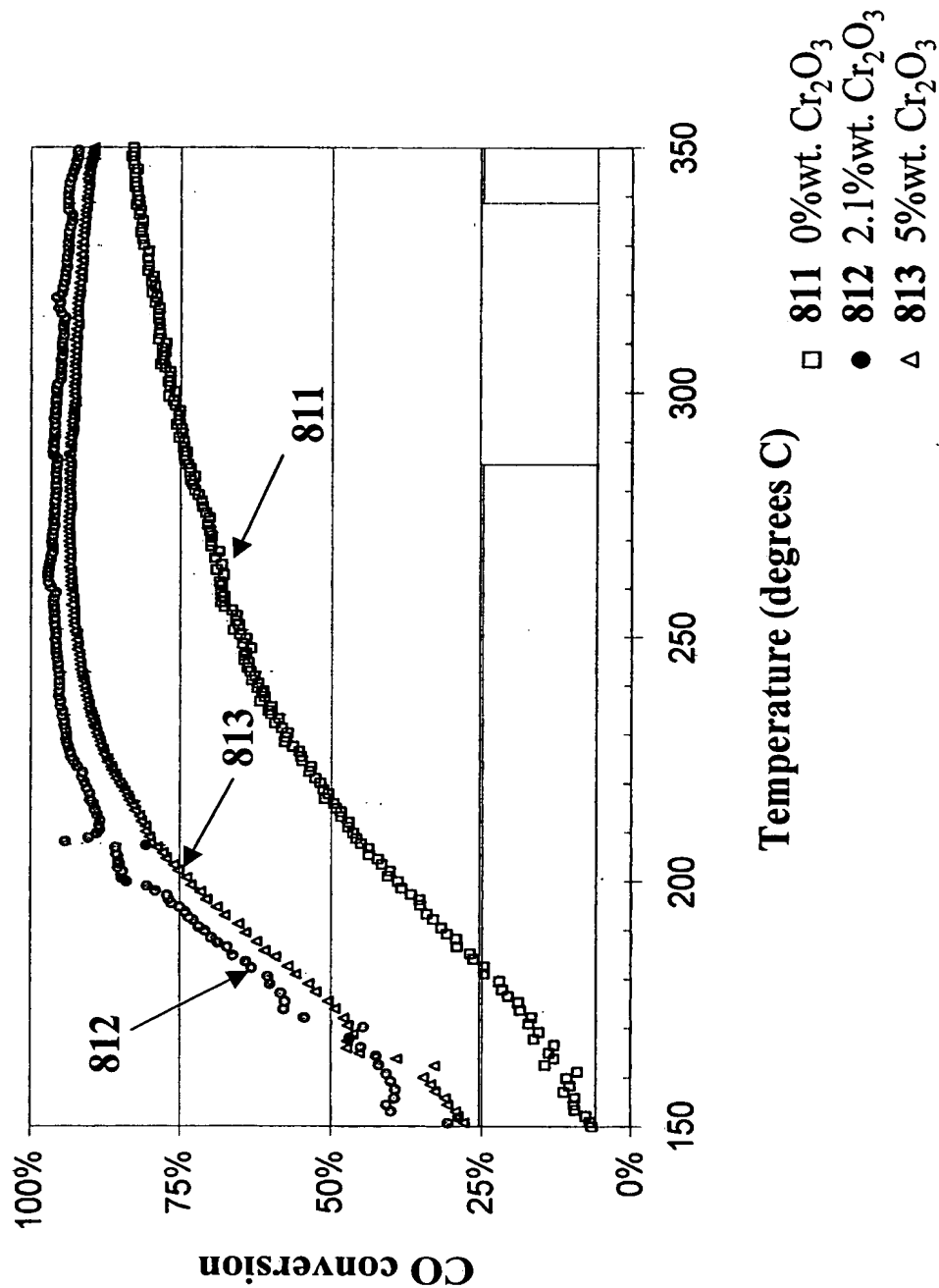


Figure 9: Effect of the Sequence of Synthetic Steps on the Catalytic Activity of $\text{CuO/Cr}_2\text{O}_3/\text{CeO}_2/\text{Al}_2\text{O}_3$ WGS Reaction Catalysts

